

III. WAGE AND SALARY DISBURSEMENTS

Wage and salary disbursements consists of the remuneration of employees and includes the compensation of corporate officers, commissions, tips, bonuses, and an imputation for pay-in-kind.¹

Wage and salary disbursements is measured before deductions, such as social security contributions and union dues, and it reflects the amount of wages and salaries disbursed, but not necessarily earned, during the period. The national and State estimates for most industries are prepared at the North American Industry Classification System (NAICS) three-digit industry level.

Wage and salary disbursements accounted for almost 56 percent of total personal income at the national level in 2003 (see table A, which also shows the relative importance of the major components of wages and salaries to total personal income).

Both the national and the State estimates of wage and salary disbursements are based primarily on the Quarterly Census of Wages and Employment (QCEW), data that originate from the State unemployment insurance (UI) system and from the UI program for Federal civilian employees. These data are assembled by the Bureau of Labor Statistics (BLS) of the Department of Labor. (See table B for the relationship between the data published by BLS and the estimate of wage and salary disbursements in the national income and product accounts.) These data are tabulated by county and by NAICS six-digit industry based on data reported on form ES-202. The QCEW data are from quarterly State UI contribution reports that are filed by the employers in the industries that are covered by, and subject to, each State's UI laws and by Federal agencies. The QCEW data underlie the State estimates of about 98 percent of wages and salaries for almost all private industries, for Federal Government civilian employees, and for State and local government employees.

Under most State UI laws, wages and salaries include bonuses, tips, and the cash value of meals and lodging provided by the employer—that is, pay-in-kind.

The estimates of wages and salaries for a few industries are prepared largely or entirely with data other than the QCEW data. These industries are either not covered by State UI or are only partly covered. For three of these industries—agricultural services, private education, and membership organizations—the estimates are prepared as the sum of (1) an estimate for the fully covered portion of the industry, based on the QCEW data, and (2) an estimate for the incompletely covered portion of the industry, based largely or entirely on other source data, as discussed below.

Wages and salaries in industries fully covered by the UI programs

The national and State estimates of wages and salaries in industries that are fully covered by State UI programs are based on quarterly QCEW data for wages and salaries, or payrolls. The national estimates of the wages and salaries of federal civilian employees are based on data provided by the Office of Personnel Management, but the State estimates are based on the QCEW data. Because the QCEW data do not precisely meet BEA's statistical and conceptual requirements, the data must be adjusted to provide

¹ See "Imputation" in the "Technical Notes."

complete coverage of all components of wages and salaries and the wages of all employees (including, for example, the wages of students and elected officials) and the proper industrial and geographic patterns.

Adjustment for congressional staff wages.—In the QCEW data for Federal civilian employees, all the wages and salaries for congressional staff are assigned to Washington, DC. However, some of these wages are earned by congressional staff who work in the State offices of the members of Congress. BEA assumes that 25 percent of the total congressional payrolls are earned by congressional staff in State offices, so this percentage of these payrolls is allocated to States in proportion to their congressional representation.

Adjustment for tax misreporting.—An estimate of the wages and salaries that were not reported by employers is added to the QCEW data for each private industry. Because State-level data are unavailable, the national estimate for each industry is allocated to States in proportion to the QCEW payroll data for the industry.

The national estimate for each industry is prepared in two parts: One part is prepared for the payrolls that were underreported by employers, and one part is prepared for the payrolls that were not reported, because employers failed to file a report.²

In addition, tips are assumed to be understated in the UI contribution reports from the following covered industries: Agricultural services excluding contract labor; taxicabs, (a part of local and interurban passenger transit); eating and drinking places; hotels and other lodging places; membership organizations; amusement and recreation services; and personal services. For each of these industries, the national estimate of the unreported tips, which is derived in the preparation of BEA's input/output accounts for benchmark years and interpolated and extrapolated for other years, is allocated to States in proportion to the QCEW payroll data for the industry.

Adjustments for wages and salaries that are not included from the QCEW data.—The QCEW payroll data for some states exclude some of the voluntary employee contributions to certain deferred compensation plans, such as 401(k) plans. The payroll data for Washington state exclude the salaries paid to corporate officers. In addition, the QCEW data for specific industries exclude certain, usually small, amounts of wages and salaries that are not covered by State UI programs.

For years prior to 1998, the voluntary contributions made by employees to deferred compensation plans are not fully reported for all States in the QCEW payroll data, although the extent of the underreporting has declined to zero. An adjustment to include these contributions is made to each industry at both the national and State levels. An adjustment for the contributions made by Alaska State government employees since 1996, based on data from the Alaska Department of Labor, is made to the state government payrolls of that state.³ The national adjustments for all other States, which are based on data from the Internal Revenue Service Form 5500 series (Annual Return/Report of Employee Benefit Plan), are distributed to the 19 States that have reported to the Bureau of Labor Statistics that they have not issued explicit reporting requirements for the contributions. The national adjustment for each industry is allocated

² Robert P. Parker, "Improved Adjustments for Misreporting of Tax Return Information Used to Estimate the National Income and Product Accounts, 1977," *Survey of Current Business* 64 (June 1984): 17-25.

³ Beginning with 1996, employers in Alaska are no longer required to include the employee contributions in the reported wages and salaries.

to those States in proportion to the amount of reported wages and salaries for the industry in those States.

The salaries of corporate officers in Washington State, who are exempt by State law from UI coverage, are excluded from the QCEW payroll data for private industries in Washington. Therefore, an adjustment is made to include these salaries based on estimates that are provided annually by the Washington State Employment Security Department.

The payrolls of railroad carrier affiliates are not included in the data for transportation services, and the payrolls of railway labor organizations are not included in the data for membership organizations other than religious. These industry segments are covered by the Railroad Unemployment Insurance system rather than by the State UI system. The employers in these segments file reports that include payroll data with the Railroad Retirement Board, which provides these data to BEA. The data for each employer are then added to the QCEW data for the appropriate industry for the Nation and for each State.

The payrolls of some nonprofit organizations are excluded from mandatory UI coverage in most States. Estimates of the payrolls of these small organizations in each of the following industries are prepared: Printing and publishing, miscellaneous manufacturing, non-depository credit institutions, holding and other investment companies, social assistance, and membership organizations other than religious. A national estimate of the employment for each industry is received from the Bureau of Labor Statistics.⁴ The national estimate of the wages and salaries for each industry is derived as the product of the employment estimate and the annual average wages and salaries of the UI-covered employees in the industry. The national estimate for the organizations in each industry is allocated to States in proportion to the QCEW payroll data for the industry.

The wages and salaries of students and of the spouses of students who are employed by the institutions of higher education in which the students are enrolled are excluded from the QCEW payroll data for private, State government, and local government educational institutions. However, employment data that include the student employees of private institutions are published annually in *County Business Patterns*. The employment data that include the student employees of government institutions are available from the Census Bureau's Governments Division. Both the national and the State estimates of the wages of these employees of private institutions, of State government institutions, and of local government institutions are derived from the differences between the QCEW employment data for these institutions and the data that include these employees.

The pay-in-kind of members of religious orders who teach at private colleges and universities is excluded from the QCEW payroll data for private education. The national estimate of pay-in-kind is distributed to states in proportion to the number of full-time

⁴ The presumed non-covered employment is derived from the Current Employment Statistics Survey (CES) which is provided by the National Benchmark Branch Division of CES, Office of Industry Employment Statistics, Bureau of Labor Statistics.

teachers who are members of religious orders, as reported in the "General Summary" of the *Official Catholic Directory*.⁵

The pay-in-kind of workers in private hospitals who do not receive cash wages are excluded from the QCEW data for private hospitals; these workers are mainly interns, student nurses, and members of religious orders. The national estimates of the wages of interns and student nurses are based on the difference between hospital employment as reported in *County Business Patterns* and in the QCEW reports, and the national estimates of the wages of members of religious orders are based on data from the *Official Catholic Directory*. The national estimate of hospital wages and salaries inclusive of the adjustments is allocated to States in proportion to the QCEW employment data for private hospitals.

The salaries of certain employees of State and local governments—primarily elected officials, members of the judiciary, and interns employed by government-operated hospitals—are excluded from the QCEW payroll data for State and local government employees. The national and State estimates are based on employment data from the BLS Current Employment Statistics program.

The commissions received by certain employees, mainly in the insurance and transportation services industries, are excluded from the QCEW data, but data that reflect these employees are available in *County Business Patterns*. For each industry, the national estimate of the wages is derived from the difference between the *County Business Patterns* employment and the QCEW employment. The national estimate for each industry is allocated to States in proportion to the QCEW payroll data for the industry.

The allowance for uniforms that is received by Federal civilian employees—primarily employees of the Postal Service—is excluded from the QCEW payroll data for Federal civilian employees. The national estimate of the allowances, which is based on direct data, is allocated to States in proportion to the geographic distribution of the QCEW employment data for the Postal Service.

As part of the 2003 comprehensive revision of the national income and product accounts (NIPAs), three components of personal income that were included in other labor income were moved to wage and salary disbursements. The three components are fees paid to jurors and witnesses, compensation of prisoners, and marriage fees paid to justices of the peace.

The national estimates of the judicial fees are based on data from the Budget of the United States Government and from the Census Bureau's annual *State Government Finances*. The state estimates are based on BEA estimates of wages paid to state government employees, excluding education.

The national estimates of the compensation of prisoners is based on data provided by the Department of Justice. The state estimates are based on state prison wages and are allocated to states that have a Federal prison.

⁵ "General Summary," *Official Catholic Directory* (New York: P.J. Kenedy and Sons). The *Directory* is published annually. The "General Summary" is a tabulation of the number of members of religious orders who are employed in Catholic institutions in each diocese and in each State. The data are classified by clerical title and by religious assignment. The data for the Archdiocese of Washington, DC, which includes the nearby suburban counties in Maryland, are apportioned between the District of Columbia and Maryland on the basis of the detailed information in the *Directory*.

In the absence of source data, the marriage fees are arbitrarily assumed to be \$10 million. The national estimate is allocated to states based on BEA estimates of wages paid to local government employees, excluding education.

Wages and salaries in industries not fully covered by the State UI programs

The estimates of wages and salaries for eight industries are primarily based on data other than QCEW data. For five industries—farms, farm labor contractors, private households, private elementary and secondary schools, and religious membership organizations—there is full UI coverage in only a few States. The other three industries—railroads, military, and "other"—are not covered by any State UI program. Consequently, the wages and salaries of all eight industries are treated as if they were not covered by State UI programs. In addition, because these estimates are primarily based on data that do not include wages paid in kind, an estimate of pay-in-kind is prepared for these industries (except farm labor contractors, railroads, and "other"). The national estimate of the pay-in-kind for each industry is identical to the imputed value of the goods and services furnished without charge by the employers to the employees, as estimated for inclusion in personal consumption expenditures.⁶

Farms.—The estimates of wages and salaries for farms consist of estimates of the cash wages and pay-in-kind of hired farm labor and the estimates of the salaries received by the owner-operators of farm sole proprietorships, partnerships, and family-held corporations.⁷ The national and State estimates of the cash wages and pay-in-kind are based on the estimates of farm labor expenses that are prepared by the U.S. Department of Agriculture (USDA) as part of its estimates of farm income.⁸ The national and State estimates of the salaries are based on unpublished data from the USDA.

Farm labor contractors.—This industry is classified in agricultural services. Farm labor contractors and their employees are only partially covered by UI laws in most States. However, in Arizona and California, all of the employees are covered. The national estimates are based on the data for contract farm labor expenses that are reported in the 1992 and 1997 Censuses of Agriculture.

For Arizona and California, the QCEW reported wages are used as the estimates. The estimates for the other States for 1992 and 1997 are based on the data for contract farm labor expenses that are reported in the censuses of agriculture for those years. The estimates for 1993-96 are based on straight-line interpolations between the 1992 and 1997 data, and the 1997 data are used to prepare the estimates for 1998-2003.

Private households.—The national estimates of the cash wages paid to the employees of private households are based on data from the Current Population Survey. The State estimates of cash wages are based on a special tabulation of journey-to-work

⁶ See lines 171-173 in Table 7.12, "Imputations in the National Income and Product Accounts," *Survey* 84 (August, 2004): 163.

⁷ Family-held corporations are those qualified under the Internal Revenue Code subchapter S.

⁸ The USDA State estimates of farm labor expenses exclude the salaries received by the owner-operators; these salaries are treated as part of the return to capital. The treatment of the salaries received by owner-operators of farms is different from the treatment of salaries received by owner-operators of nonfarm enterprises. Their salaries are included in nonfarm proprietors' income.

(JTW) data from the 2000 Census of Population. The wage data were extrapolated by the annual change in the population. The extrapolated series for each year was adjusted proportionately to sum to the national estimate of cash wages. The national estimates of pay-in-kind were distributed to the states using JTW place-of-work data on private household employment. The employment data were extrapolated from 2000 using a method similar to that used for wages.

Private elementary and secondary schools.—This industry is partially covered by State UI programs, but it is treated as if it were not covered, because religiously affiliated schools, which are exempt from State UI coverage, account for most of the wages and salaries for this industry. The national and State estimates of cash wages are based on annual payroll data reported in CBP.⁹ The national estimate of the pay-in-kind for these schools is distributed to states on the basis of the number of full-time teachers in religious orders.¹⁰

Religious membership organizations.—The national and State estimates of cash wages for religious membership organizations are based on payroll data reported for these organizations in *County Business Patterns*.

The estimate of pay-in-kind for religious membership organizations reflects the value of the food, laundering, lodging, and miscellaneous items received by members of Catholic clergy in religious service who do not work in hospitals or in schools.¹¹

Because of the lack of State-level data, the national estimate is allocated to the States after it has been divided into the following two categories: (1) The value of food and laundering, and (2) the value of miscellaneous items and the rental value of Catholic rectories and convents.

The State estimates are combinations of estimates for the two categories. The allocating series for the first category is computed as the total number of members of Catholic clergy in religious service in each State less the number of members who work in hospitals and who teach; the allocating series for the second category is computed as the sum of the number of members who receive no cash wages and the number of resident pastors.¹²

Railroads.—The national and State estimates of the wages and salaries paid by railroad companies, which are not covered by the State UI system, are based on wage and salary data from the Railroad Retirement Board (RRB). The RRB data that are used for the State estimates represent the wages and salaries subject to the payroll tax that supports the railroad retirement system; these data are tabulated according the State of residence of the employee. The data are adjusted (1) to reflect the portion of the wages and salaries not subject to the tax and (2) to convert them to a place-of-work basis. The former adjustment is based on the RRB-reported number of the employees living in each State whose wages or salaries exceed the limit for retirement taxation. The latter is based on JTW data for railroad employees from the 2000 census.

⁹ The *County Business Patterns* data are tabulated from the administrative records of the old-age, survivors, and disability insurance program. This program exempts nonprofit religious organizations, such as these schools, from mandatory coverage, but its provisions for elective coverage have resulted in the participation of most of these schools.

¹⁰ *Official Catholic Directory*. See also footnote 5.

¹¹ The pay-in-kind of those who work in hospitals and schools has already been discussed.

¹² The State estimates of pay-in-kind for the two categories are based on data from the *Official Catholic Directory*. See also footnote 5.

Military.—The estimates of wages and salaries for the military services consist of the estimates of cash wages (including allowances) of full-time personnel of the armed services (including the Coast Guard), the estimates of cash wages of the members of the Reserves including the National Guard, and the estimates of pay-in-kind received by the full-time and reserve enlisted personnel of the armed services.¹³

The national estimates of the cash wages of the military services are based on data from the budget of the United States.

The State estimates of cash wages of the full-time personnel of the Army, the Navy, the Air Force, and the Marine Corps are prepared in three steps. First, approximations of quarterly cash wages are calculated for subgroups of personnel—for officers and for enlisted personnel in the Navy and Marine Corps and for each pay grade of the Army and the Air Force. The approximations are derived from quarterly averages of monthly data on the number of military personnel at each installation and from national annual data on average pay for each subgroup from the Department of Defense.¹⁴ The quarterly average number of personnel are summed to obtain the quarterly average number of personnel for each subgroup in each county, and then—in order to obtain an approximation of the quarterly cash wages for each subgroup in each county—the quarterly average number of personnel in each county is multiplied by the national annual average pay (for example, the number of Navy officers in each county is multiplied by the national average pay of Navy officers).

Second, in order to obtain the State approximations of the quarterly cash wages for each service, the approximations of the quarterly cash wages for each subgroup in each county are summed to obtain county approximations, and the county approximations for each service are summed to obtain the State approximations. Third, the quarterly State approximations for each service are averaged to yield calendar year approximations, which are then adjusted proportionately to sum to the national estimates.

The national estimate of cash wages for the full-time personnel of the Coast Guard is allocated to States in proportion to an annual summation of the monthly Coast Guard payroll from the Department of Transportation.

The national estimate of wages for the Reserves for each calendar year is allocated to States in proportion to payroll data for the calendar year from the Washington Headquarters Service of the Department of Defense.

The national estimate of the pay-in-kind of the full-time personnel in the Coast Guard is allocated to the States in proportion to the number of enlisted personnel in the Coast Guard that is reported by the Department of Transportation, and the national estimate for each of the other services is allocated by the number of enlisted personnel in each service that is reported by the Department of Defense. The national estimate for the Reserves is allocated to States in the proportion to the estimates of cash pay.

Other.—The estimates of wages and salaries for this category consist of the wages and salaries of U.S. residents who are employed by international organizations and by foreign embassies and consulates in the United States.

¹³ The estimates of pay-in-kind reflect the value of the food and standard-issue clothing received by enlisted personnel.

¹⁴ The Army and the Air Force provide average base pay; the Navy and Marine Corps provide average base pay and allowances.

The national estimates are prepared by BEA as part of the balance of payments accounts. The national estimates for all years are allocated to States in proportion to estimates of the administrative expenditures of these organizations in 1968.

Table A.--Relative Importance to Personal Income of Wage and Salary
Disbursements, by Component, United States, 2003

	Millions of dollars	Percent of personal income
Personal Income /1/..	9,148,680	100.00
Wage and salary disbursements/2/..	5,095,173	55.69
Farm..	17,615	0.19
Forestry, fishing, related activities and other/3/..	16,714	0.18
Mining..	31,347	0.34
Utilities..	39,728	0.43
Construction..	275,398	3.01
Manufacturing..	668,753	7.31
Durable goods manufacturing..	434,368	4.75
Wood product manufacturing..	17,470	0.19
Nonmetallic mineral product manufacturing..	20,457	0.22
Primary metal manufacturing..	22,612	0.25
Fabricated metal product manufacturing..	58,755	0.64
Machinery manufacturing..	55,723	0.61
Computer and electronic product manufacturing..	94,709	1.04
Electrical equipment and appliance manufacturing..	20,033	0.22
Transportation equipment manufacturing..	98,088	1.07
Furniture and related product manufacturing..	17,907	0.20
Miscellaneous manufacturing..	28,614	0.31
Nondurable goods manufacturing..	234,385	2.56
Food manufacturing..	51,870	0.57
Beverage and tobacco product manufacturing..	9,498	0.10
Textile mills..	8,438	0.09
Textile product mills..	5,171	0.06
Apparel manufacturing..	8,474	0.09
Leather and allied product manufacturing..	1,601	0.02
Paper manufacturing..	25,103	0.27
Printing and related support activities..	26,406	0.29
Petroleum and coal products manufacturing..	7,819	0.09
Chemical manufacturing..	59,039	0.65
Plastics and rubber products manufacturing..	30,966	0.34
Wholesale trade..	288,710	3.16
Retail trade..	367,332	4.02
Transportation and Warehousing..	162,984	1.78
Air transportation	28,409	0.31
Rail transportation	11,765	0.13
Water transportation	3,022	0.03
Truck transportation	48,482	0.53
Transit and ground passenger transportation	9,226	0.10
Pipeline transportation	3,187	0.03
Scenic and sightseeing transportation	636	0.01
Support activities for transportation	20,396	0.22
Couriers and messengers	20,031	0.22
Warehousing and storage	17,830	0.19
Information..	185,378	2.03
Publishing industries, except Internet	56,248	0.61
Motion picture and sound recording industries	18,100	0.20
Broadcasting, except Internet	18,027	0.20
Internet publishing and broadcasting	1,997	0.02
Telecommunications	63,782	0.70

ISPs, search portals, & data processing	25,498	0.28
Other information services	1,726	0.02
Finance and insurance..	389,432	4.26
Real estate and rental and leasing..	74,705	0.82
Professional and technical services..	422,813	4.62
Management of companies and enterprises..	120,099	1.31
Administrative and waste services..	198,277	2.17
Educational services..	78,959	0.86
Health care and social assistance..	500,138	5.47
Arts, entertainment, and recreation..	53,785	0.59
Accommodation and food services..	159,559	1.74
Other services, except public administration..	162,206	1.77
Government and government enterprises..	881,241	9.63
Federal, civilian..	147,401	1.61
Military..	66,259	0.72
State and local..	667,581	7.30

Footnotes

1. Includes the adjustment for residence which is the net inflow of the earnings of interarea commuters. For the United States, it consists of adjustments for border workers: Wage and salary disbursements to U.S. residents commuting to Canada less wage and salary disbursements to Canadian and Mexican residents commuting into the United States.

2. Includes wages received by border workers employed in the United States.

3. "Other" consists of the wage and salary disbursements of U.S. residents employed by international organizations and foreign embassies and consulates in the United States.

NOTE.-- Detail may not add to totals due to rounding.

Table B.--National Wages and Salaries in the BEA State Estimates and Wages from
the BLS
(Billions of dollars)

	2000	2001	2002	2003
Total wages, BLS /1/...	4,587.7	4,695.2	4,714.4	---
Plus: Adjustments made by BEA:				
For unreported wages and unreported tips on employment tax returns...	99.8	103.3	106.5	---
For selected industries /2/...	123.1	126.2	137.2	---
Other /3/...	18.7	18.1	18.2	---
Equals: Wage and salary disbursements, BEA...	4,829.2	4,942.8	4,976.3	5,103.6

Footnotes

1. Total annual wages of workers covered by state unemployment insurance (UI) laws and by the Unemployment Compensation for Federal Employees program.

2. Consists of the difference between estimates from more comprehensive source data and BLS wages and salaries for agriculture, forestry and fishing; railroad transportation; health services; educational services; social services; membership organizations; private households; and the Federal Government.

3. Consists of wages and salaries for the insurance agents, for the students and their spouses employed by public colleges or universities, for the nonprofit organizations not participating in the UI program, and of other adjustments.

BEA Bureau of Economic Analysis
BLS Bureau of Labor Statistics